MODIS Technical Team Meeting
Thursday, April 11, 2002
Building 33, Room E125

Vince Salomonson chaired the meeting. Present were Bruce Ramsay, Bill Barnes, Jack Xiong, Wayne Esaias, Dorothy Hall, John Weier, Barbara Conboy, Shaida Johnston, Steve Kempler, Eric Vermote, and Ed Masuoka, with Rebecca Lindsey taking the minutes.

1.0 Upcoming Meeting

- AGU, Spring, May 28-Jun 1, Washington, D.C.
- AMS, Atmospheric Radiation and Atmospheric Physics, first week of June, Odgen, Utah.
- MODIS Outreach Workshop on Land Cover Variables, June 3-4, University of Maryland, College Park.
- IGARSS 2002, June 24-28, 2002 in Toronto (abstract deadline past)
- MODIS Outreach Workshop on MODIS Vegetation Variables (VI/LAI/FPAR/NPP), July 15-19th 2002, University of Montana, Missoula, MT
- MODIS Science Team Meeting, Tentative, July 22-24, 2002
- Remote Sensing of the Earth's Environment from Terra, a workshop at the International Summer School on Atmospheric and Oceanic Sciences, August 25-30, 2002, L'Aquila Italy
- 34TH COSPAR Scientific Assembly, October 10-19, 2002, in Houston, TX, (abstracts due 1 May)
- MODIS Outreach Workshop on Land Surface Radiation Products, October 24-25, 2002, Boston

2.0 Meeting Minutes

Instrument Update

Barnes reported that the with respect to the problems with the Aqua AMSR MLI "doghouse" that were discussed at the April 4, 2002, meeting, (that a cabling box was reflecting light into the exclusion zone of MODIS' Solar Diffuser cavity), the part of the box that was in the way was flattened down, and then TRW stitched a blanket over it so that it would not pop back up on orbit. Roger Drake, Santa Barbara Remote Sensing, had evaluated the new configuration and was satisfied that the issue was resolved. Barnes had spoken with Ken Anderson who said Aqua launch is unlikely before May 1.

Barnes reported that the rate of formatter resets on Terra MODIS is increasing as the time between rollovers gets smaller. There will be a meeting with Project people on Monday to discuss EEPROMS. Yesterday MCST had word from Oceans that following the March "safehold" for MODIS the left side of images is showing RVS effects, and it appears they will have to renormalize the SST. No change has been detected in ocean color yet. Barnes said MCST is still working on the issue of mirror-side correlated noise, which appears to have changed state since the March shut down.

Salomonson said Nazmi El Saleous is trying to make a 36-band chips for educational purposes, and it is proving to be hard. One problem is in the 1.38-µm band, which is showing the effect of the 5-µm leak (land surface reflectance showing through). He is also trying to remove lines in thermal bands. Salomonson said that he had been hoping that the more recent L1B wouldn't exhibit so much thermal leak and striping. Barnes said that the striping correction is not in production yet.

Johnston said that with respect to the issue of whether or not NPP was waiting for information from the MODIS Team on their experience with MODAPS or the team's decision to develop discipline processing strings, it appears that they are not waiting for us. She was unable to talk to Bob Murphy or Joy Henegar, but she did speak with Kelly Jeletic. They are currently only planning L1B, not higher up yet. So they are not looking to MODAPS experience for guidance at this point. They are considering having L1 production housed in discipline-specific locations along with higher-level processing. She still thinks we should volunteer our "lessons learned" on the subject. Barnes thinks Murphy should provide that input.

Ramsay reported that he, NOAA/NESDIS/ORA, Donna McNamara, and John Paquette, NOAA/NESDIS/OSDPD, had met with Chris Justice and the MODIS Land Rapid Response group at UMD to outline a proposal to migrate MODIS LRR as a operational demonstration system in NESDIS. It was a productive session, and they determined the outlines of the proposal, which includes integration of a test bed system in OSDPD. Ramsay will update Martha Maiden with details of the proposal which will be finalized over the next two weeks. They have a May 4 funding proposal due date driving the process internally. Ramsay also reported that the NOAA/NESDIS near real time processing system (the bent-pipe) has gone global (Terra/MODIS), and the dark fiber gigabit/second communications line is on track for installation in late summer this year. The line will transfer data to Suitland and Camp Springs. Ramsay also reported that Mitch Goldberg was selected as the new Chief for the Climate Research and Applications Division, Office of Research and Applications, NOAA/NESDIS.

Barnes said he heard a talk at a recent IPO meeting by someone from NOAA-NESDIS that reported they were inputting 128 Gigabits of data per day to NCEP, 75 of which is MODIS data. Ramsay thought that sounded reasonable.

Vermote reported he is still making progress on the Interdisciplinary Global Sampler data set. Oceans has decided to redo their SST to include only the best quality pixels. Land is progressing, but is not ready. He has been looking at windows-based tools to put on the CD. The ones he has found allow users to open the HDF files and see SDSs as a spreadsheet. However, if users want more capability (like making images) a more expensive tool will have to be used. Ramsay said NOAA has produced CDs with commercial software on them.

Kempler reported that the DAAC is now making subsampled data for all current production. They are still looking at doing subsampled data while doing oceans reprocessing. They have about a month before oceans reprocessing begins, and they are cautiously optimistic. This data is $1/25^{th}$ the size of the L1B, and so they are thinking of putting those data on a DVD. They experienced some hardware problems over the past week, and they also had a security problem.

Masuoka reported that he had asked MODAPS to produce a matching Gulf of Mexico Land Surface Reflectance granule at L2 for Janet Campbell. He also reported that they finally received and installed all pieces of the Linux cluster hardware, and they would be installing software over the next two weeks. Barnes asked about an aggregation algorithm for Band 6. Masuoka said he would remind Robert Wolfe about providing an algorithm to MCST.

With respect to software release, he reported that they are planning to deliver the Collection 4 Oceans code when the time comes, but that he didn't think they would release Collection 3. Esaias agreed, but wondered whether it would be good to go ahead and deliver the code to Pat Coronado at the Direct Broadcast to begin preparing it for release. Masuoka said he would check into how long it would take Coronado to prepare after MODAPS made the delivery. Salomonson said to go ahead and deliver the Collection 3 code for Land and Atmosphere.

Masuoka reported that they are trying to get more code deliveries from the land team, as some developers have missed their deadlines. The Collection 4 deliveries of Land and Atmosphere need to be staggered over the next several months to give SDST enough time to integrate them.

Esaias said that Bob Evans sent up some MOBY-MODIS-SeaWiFS comparisons and things look as good for MODIS as SeaWiFS. On the task to merge MODIS and SeaWiFS Ocean Color data, SeaWiFS has merged the MODIS test data we sent, and they will be sending them the chlorophyll as part of the reprocessing when it starts. He added that in anticipation for reprocessing, they are identifying and cutting out some diagnostic data sites so that when they go through reprocessing they can send out these sites to SIMBIOS for match-up comparisons.

Kempler reported that the DAAC had given a demo to Vanessa Griffin on data mining, and he would like to repeat that demo to some of the MODIS Team encourage thought about algorithms and how they could be developed in the data-mining framework.

3.0 Action Items

3.1 Discipline leads to meet to resolve the issue of beta-release code and science-quality code, and what we need to say about it.
Status: Open.
3.2 Technical team to discuss further the issue of predicted ephemeris data and how to improve it.
Status: Open.